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# RETROVERTED UTERUS: AN UNUSUAL CAUSE OF CHRONIC LOW BACK PAIN

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### **ABSTRACT**

Retroverted uterus can be associated with chronic low back pain. Physicians should keep in mind this cause of chronic low back pain for the premenopausal women. Here we presented two female patients at the ages of 21 and 28; they were diagnosed as retroverted uterus by Magnetic Resonance Imaging with any other cause of chronic low back pain.

## INTRODUCTION

Retrovertion is an anatomical variation of the uterus which can be associated with low back pain, as well as the chronic pelvic pain. Also it can cause congestive dysmenorrhea, deep dyspareunia, and bladder and bowel symptoms [1]. There are surgical interventions for the treatment of the symptomatic retroverted uterus, and it is important to diagnose, and treat this abnormality. Retroverted uterus should be kept in mind by the physicians who meet with female patients at premenopausal ages suffering from chronic low back pain after excluding the common causes of low back pain. Here we presented three patients with chronic low back pain who were diagnosed as retroverted uterus.

# Case 1

A 21 years old female patient who presented with chronic low back pain for 24 months was examined for mechanical and inflammatory causes of low back pain. She was suffering from dysmenorrhea and premenstrual pain,

too. She reported any trauma or family history of spondyloarthropathy. There was no radiculopathy sign or muscle spasm. She didn't meet the criteria of fibromyalgia. Lomber Schober test was normal. Straight leg raising, Laseque tests and sacroiliac compression tests were normal. Muscle strength and sensation were normal, too. There was no pathological finding in the lomber and sacroiliac magnetic resonance images, except the retroverted uterus. Sedimentation was 15 (0-20), and the CRP was 0.04 (0-5). Patient was referred to gynecologist.

### Case 2

A 28 years old woman who was suffering from mechanical low back pain appealed to our rheumatology clinic. Her complaint was continuing for 24 months. Also, she complained of dysmenorrhea and dyspareunia. She reported any trauma or family history of spondyloarthropathy. There was no radiculopathy sign or muscle spasm. She didn't meet the criteria of fibromyalgia.



We found any abnormality in the physical examination of the patient. There was no pathological finding in the lomber and sacroiliac magnetic resonance images, except the retroverted uterus. Sedimentation was 7 (0-20), and the CRP was 0,05 (0-5). Patient was referred to gynecologist.

### DISCUSSION

As we know, abnormalities of the uterus are unusual causes of low back pain [2]. In the literature there is lack of studies investigating the association between chronic low back pain and uterine version.

In some previous studies menstrual pain, intermenstrual pain and dyspareunia were found related to uterine version (anteverted or retroverted) and the angle of uterine flexion (actual angle between cervix and uterine body) [3,4].

According to our knowledge, sympathetic fibers deriving from the superior hypogastric plexus, and the parasympathetic fibers from S2, S3, and S4- which are related with the uterosacral ligaments- are associated with the menstrual pain [1]. Probably, the same mechanism causes the low back pain.

Lesions within the pelvis, like large myomas impinging on the sciatic nerve can cause the similar symptoms of lumbosacral radiculopathy [5]. Also abnormalities of the reproductive tract causing an accumulation of menstrual blood in the vagina, uterus and fallopian tubes represent an unusual extraspinal cause of low back pain with radiculopathy [6]. Except the retroverted uterus any uterine abnormality was found in

our patients. We found no radiculopathy sign or symptom in our patients, too.

In a study conducted with 111 premenopausal women, retroverted uterus rate was found 24.3% [7]. It is reported that retroverted uterus was found associated with a higher prevalence of dyspareunia, a higher visual analogue scale score for dyspareunia, and a higher prevalence of severe dysmenorrhea [7]. Similar to this findings, our patients were suffering from dysmenorrhea, and one of them was suffering from dyspareunia. Authors reported no association between uterine retroversion and noncyclic pain, ovulation pain, or premenstrual pain [7]. Contrary to this study, one of our patients complained of premenstrual pain whether due to retroverted uterus or not.

Because of being a rare but probable cause of low back pain, retroverted uterus should be kept in mind by the physicians who meet with female patients at premenopausal ages suffering from chronic low back pain.

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#### CONFLICT OF INTEREST:

The authors declare that they have no conflict of interest.

### STATEMENT OF HUMAN AND ANIMAL RIGHTS

All procedures performed in human participants were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. This article does not contain any studies with animals performed by any of the authors.

# REFERENCES

- 1. Porpora MG, Gomel V. (1997). The role of laparoscopy in the management of pelvic pain in women of reproductive age. *Fertil Sterile*, 68, 765-779.
- 2. Knight RJ, Birkinshaw R. (2005). An unusual cause of lower back pain: uterus didelphys and unilateral cervical atresia. Int *J Clin Pract Suppl*, 147, 125-127.
- 3. Cagnacci A, Grandi G, Cannoletta M, Xholli A, Piacenti I, Volpe A. (2014). Intensity of menstrual pain and estimated angle of uterine flexion. *Acta Obstet Gynecol Scand*, 93(1), 58-63.
- 4. Ott J, Nouri K, Demmel M, Zafraani S, Greilberger U, Huber JC, Mayerhofer K. (2010). Fourteen-year experience with laparoscopic ventrosuspension in patients with retroverted and retroflected uterus and pelvic pain syndromes. *J Minim Invasive Gynecol*, 17(6), 749-753.
- 5. Bodack MP, Cole JC, Nagler W. (1999). Sciatic neuropathy secondary to a uterine fibroid: a case report. *Am J Phys Med Rehabil*, 78(2), 157-159.
- 6. Deathe AB. (1993). Hematometra as a cause of lumbar radiculopathy. A case report. *Spine (Phila Pa 1976)*, 18(13), 1920-1921.
- 7. Fauconnier A, Dubuisson JB, Foulot H, Deyrolles C, Sarrot F, Laveyssière MN, Jansé-Marec J, Bréart G. (2006). Mobile uterine retroversion is associated with dyspareunia and dysmenorrhea in an unselected population of women. *Eur J Obstet Gynecol Reprod Biol*, 127(2), 252-256.

